

Material Safety Data Sheet

Material Name: ALUMIPREP® 33

ID: 234449

*** Section 1 - Chemical Product and Company Identification ***

Product Trade Name ALUMIPREP® 33

Manufacturer Information

Henkel Surface Technologies
Henkel Corporation
32100 Stephenson Highway
Madison Heights, MI 48071

Contact Phone: (248) 583-9300

Chemtrec Emergency # (800) 424-9300

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
111-76-2	Ethylene glycol n-butyl ether	10-30
7664-38-2	Phosphoric acid	10-30
7789-23-3	Potassium fluoride	1-10

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Glycol ethers, Fluorides (16984-48-8).

*** Section 3 - Hazards Identification ***

Emergency Overview:

DANGER -- CORROSIVE! COMBUSTIBLE! Contact with this material will cause burns to the skin, eyes and mucous membranes.

Eye Contact:

This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Skin Contact:

Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. Following skin exposure to this product, the sensation of irritation or pain may be delayed.

Skin Absorption:

A component in this product may be absorbed through the skin, especially if skin is damaged. Product contains a glycol ether which caused blood disorders in rabbits.

Ingestion:

This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. May cause dizziness, incoordination, headache, nausea, and vomiting.

Inhalation:

Inhalation of mists of this product may cause severe irritation and burns to the respiratory tract. Inhalation of mists or vapors may produce upper airway edema, wheezing, pulmonary edema, pneumonitis and respiratory failure.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory disorders.

*** Section 4 - First Aid Measures ***

Eye Contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Skin Contact:

Immediately take off all contaminated clothing. For skin contact, flush with large amounts of water. Seek immediate medical attention.

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Ingestion:

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Inhalation:

If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

*** Section 5 - Fire Fighting Measures ***

Flash Point: 145 °F (62.8 °C)

Method Used: T.C.C.

Flammability Classification: Combustible

Upper Flammable Limit (UFL): Not applicable

Lower Flammable Limit (LFL): Not applicable

Fire & Explosion Hazards:

Fire and explosion hazards are moderate when this product is exposed to heat or flame. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

Decomposition Products:

Irritating and toxic gases or fumes may be released during a fire.

Extinguishing Media:

Use any media suitable for the surrounding fires.

Fire-Fighting Instructions:

Firefighters should wear full protective clothing including self contained breathing apparatus.

*** Section 6 - Accidental Release Measures ***

Containment Procedures:

Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean-up.

Clean-Up Procedures:

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of collected material according to regulation.

*** Section 7 - Handling and Storage ***

Handling Procedures:

Do not get this material in your eyes, on your skin, or on your clothing. Wash thoroughly after handling. Do not inhale vapors or mists of this product. Keep this product from heat, sparks, or open flame. For industrial use only.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

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B: Component Exposure Limits

Ethylene glycol n-butyl ether (111-76-2)

ACGIH: 20 ppm TWA
skin - potential for cutaneous absorption
OSHA: 25 ppm TWA; 120 mg/m3 TWA
Prevent or reduce skin absorption
NIOSH: 5 ppm TWA; 24 mg/m3 TWA
Potential for dermal absorption

Phosphoric acid (7664-38-2)

ACGIH: 1 mg/m3 TWA
3 mg/m3 STEL
OSHA: 1 mg/m3 TWA
3 mg/m3 STEL
NIOSH: 1 mg/m3 TWA
3 mg/m3 STEL

Potassium fluoride (7789-23-3)

ACGIH: 2.5 mg/m3 TWA (as F) (related to Fluorides)
OSHA: as F: 2.5 mg/m3 TWA (related to Fluorides)
NIOSH: as F: 2.5 mg/m3 TWA (related to Fluorides)

Engineering Controls:

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face Protective Equipment:

Wear chemical goggles; face shield (if splashing is possible).

Skin Protection:

Use impervious gloves. Use of impervious apron and boots are recommended.

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Personal Protective Equipment:

Eye wash fountain and emergency showers are recommended.

*** Section 9 - Physical & Chemical Properties ***

Physical State:	Liquid	Appearance:	Clear, colorless
Odor:	Slight solvent	Vapor Pressure:	Not determined
Vapor Density:	Not determined	Boiling Point:	>200 °F (>93.3 °C)
Specific Gravity:	1.1-1.2	pH:	<2
Viscosity:	Not applicable	VOC:	14%
Solubility Water:	Complete	Evaporation Rate:	Not determined
Percent Volatile:	Not determined	Percent Solids:	Not applicable

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

Keep away from heat, ignition sources and incompatible materials.

Incompatibility:

This product may react with strong oxidizing agents.

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Decomposition Products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. May liberate hydrogen fluoride.

Hazardous Polymerization:

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Ethylene glycol n-butyl ether (111-76-2)

Inhalation LC50 Rat : 450 ppm/4H

Inhalation LC50 Mouse : 700 ppm/7H

Oral LD50 Rat : 470 mg/kg

Oral LD50 Mouse : 1230 mg/kg

Dermal LD50 Rabbit : 220 mg/kg

Phosphoric acid (7664-38-2)

Inhalation LC50 Rat : >850 mg/m3/1H

Oral LD50 Rat : 1530 mg/kg

Dermal LD50 Rabbit : 2740 mg/kg

Potassium fluoride (7789-23-3)

Oral LD50 Rat : 245 mg/kg

Carcinogenicity:

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Potassium fluoride (7789-23-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (as F) (related to Fluorides)

Chronic Toxicity

Contains fluorides. Exposure to fluorides over years may cause fluorosis. Ethylene glycol n-butyl ether has caused red blood cell hemolysis in laboratory animals and secondary injury to the kidney and liver.

Epidemiology:

No information available for the product.

Neurotoxicity:

No information available for the product.

Mutagenicity:

No information available for the product.

Teratogenicity:

No information available for the product.

Other Toxicological Information:

None available.

*** Section 12 - Ecological Information ***

Ecotoxicity:

A: General Product Information

No data available for this product.

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B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Ethylene glycol n-butyl ether (111-76-2)

Test & Species

LC50 (96 hr) bluegill 1490 mg/L.
LC50 (24 hr) goldfish 1650-1700 mg/L.

Conditions

Static, 23 °C.
~LC50 (24 hr) water flea: 1720 mg/L.:

Phosphoric acid (7664-38-2)

Test & Species

LC50 (96 hr) mosquito fish 138 mg/L.

Conditions

Environmental Fate:

No data is available concerning the environmental fate, biodegradation or bioconcentration for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Numbers & Descriptions:

A: General Product Information

This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions:

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Please refer to the container label for transportation information.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Ethylene glycol n-butyl ether (111-76-2)

SARA 313: form R reporting required for 1.0% de minimis concentration; Chemical Category N230; (applies to R-(OCH₂CH₂)_n-OR''' ethers, where n = 1, 2, or 3'''; R=alkyl C7 or less or R = phenyl or alkyl subst. phenyl; R''' = H or alkyl C7 or less, or OR''' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate) (related to Glycol ethers)

CERCLA: (Includes mono- and di- ethers of ethylene glycol; diethylene glycol and triethylene glycol R-(OCH₂CH₂)_n-OR'' where n = 1 2 or 3; R = alkyl or aryl groups; R'' = R h or groups which when removed yield glycol ethers with the structure R-(OCH₂CH₂)_n-OH. Polymers are excluded from glycol category); Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to Glycol ethers)

Phosphoric acid (7664-38-2)

CERCLA: final RQ = 5000 pounds (2270 kg)

SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactive: No

State Regulations

A: General Product Information

No additional information available.

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B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Ethylene glycol n-butyl ether	111-76-2	Yes	Yes	Yes	Yes	Yes	Yes
Phosphoric acid	7664-38-2	Yes	Yes	Yes	Yes	Yes	Yes
Potassium fluoride (¹ related to Fluoride) (² related to Fluorides)	7789-23-3	Yes ¹	No	No	Yes ²	Yes	Yes ¹

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Ethylene glycol n-butyl ether	111-76-2	Yes	Yes	Yes
Phosphoric acid	7664-38-2	Yes	Yes	Yes
Potassium fluoride	7789-23-3	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Ethylene glycol n-butyl ether	111-76-2	1% item 721 (824)
Phosphoric acid	7664-38-2	1% item 1291 (127)

* * * Section 16 - Other Information * * *

NFPA Ratings: Health: 3 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

HMIS Ratings: Health: 3* Fire: 2 Reactivity: 0 Pers. Prot.: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Henkel Surface Technologies bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

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This is the end of MSDS # 234449